

CLAIMS

1. A form having a removable piece attached thereto by a magnetic system comprising:
- (a) a magnetic assembly having a depth-of-pull sufficient to cause the removable piece to begin to seek home at a distance from the form of about one inch, said magnetic assembly being positioned on said form or said removable piece; and
- (b) an attracted material positioned on the other of said form or said removable piece so as to mate with said magnetic assembly.
2. The form of claim 1 wherein said depth-of-pull is sufficient to cause the removable piece to begin to seek home at a distance of about two-thirds of an inch.
3. The form of claim 1 wherein said magnetic assembly has a depth-of-pull of at least about 120 gauss at a distance of one inch.
4. The form of claim 1 wherein said magnetic assembly has a depth-of-pull of at least about 240 gauss at a distance of at least about one inch.
5. The form of claim 1 wherein said magnetic assembly has an on-contact strength of at least about 60 pounds.
6. The form of claim 1 wherein said magnetic assembly has an on-contact strength of at least about 85 pounds.
7. The form of claim 1 wherein said magnetic assembly has an on-contact strength no greater than about 120 pounds.
8. The form of claim 1 wherein said magnetic assembly is a cup magnetic assembly comprising a circular cup serving as a pole piece.

9. The form of claim 8 wherein said magnetic assembly comprises a ring magnet positioned within said cup.
10. The form of claim 9 wherein said ring magnet is a ceramic magnet.
11. The form of claim 10 wherein said ceramic magnet is a strontium ferrite ring.
12. The form of claim 11 wherein said magnetic assembly comprises at least one neodymium magnet.
13. The form of claim 12 wherein said magnetic assembly comprises two neodymium radial arc magnets touching said ceramic magnet but spaced apart from said pole piece.
14. The form of claim 13 wherein said radial arc magnets are spaced apart from said pole piece at least about one-eighth inch.
15. The form of claim 14 wherein said circular cup comprises at least one flange attached to thereto for embedding into the material of said form.
16. The form of claim 15 wherein said flange is attached to the bottom of said circular cup.
17. The form of claim 1 wherein said magnetic system comprises a disc of attracted material for mating with said magnetic assembly presents a planar circular face.
18. The form of claim 1 wherein said attracted material is on said removable piece.
19. The form of claim 1 wherein said attracted material is on said form.

20. The form of claim 1 comprising a removable piece comprising said attracted material at one end and said magnetic assembly on the other end.

21. The form of claim 17 wherein said magnetic system comprises at least one mating pin on one of said magnetic assembly or said circular face, and a mating hole positioned to mate with said mating pin on the other of said magnetic assembly or said circular face.

22. The form of claim 17 wherein said magnetic system comprises at least one index pin on one of said magnetic assembly or said circular face, and an index hole positioned to mate with said index pin on the other of said magnetic assembly or said circular face.

23. The form of claim 22 wherein said magnetic system comprises a plurality of index holes positioned to mate with said index pin.

24. The form of claim 1 wherein said removable piece is selected from the group consisting of an arm, an upper arm, a lower arm, a hand, a leg, an upper leg, a lower leg, a foot, a head, a torso, a pelvis, and a shoulder cap.

25. A removable piece for a form comprising a magnetic assembly having a depth-of-pull of at least about 120 gauss at a distance of one inch, positioned for mating with an attracted material on said form.

26. The removable piece of claim 25 wherein said magnetic assembly has an on-contact strength of at least about 60 pounds.

27. A form comprising a magnetic assembly having a depth-of-pull of at least about 120 gauss at a distance of one inch, positioned for mating with an attracted material on a removable piece for attachment to said form.

28. The form of claim 27 wherein said magnetic assembly has an on-contact strength of at least about 60 pounds.

29. A method of assembling a form comprising attaching a form of claim 27 to a removable piece wherein said removable piece comprises an attracted material positioned to mate with a magnetic assembly on said form.

30. A method for attaching a removable piece to a form or comprising placing a magnetic attachment system contained in the removable piece and/or form in approximate alignment, and allowing magnetic force to complete the mating.